NBC NEWS - STS-7 LAUNCH (6-18-1983)

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From Saturday, June 18th 1983 NBC NEWS Coverage of STS-7, the first mission to include the first American woman and 3rd woman in history to travel into space.

- Launched at 7:33:00 A.M E.T

  STS-7 CREW:

  Commander: Robert L. Crippen
  Pilot: Frederick H. Hauck
  Mission Specialist 1:John M. Fabian
  Mission Specialist 2:Sally K. Ride
  Mission Specialist 3:Norman E. Thagard

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is programming to bring you an nbc news special on the historic flight of america's first woman in space we have main engine ignition four three two one zero and liftoff liftoff of the orbiter challenger and the sixth flight of the space shuttle hey we're going out for another ride uh that's going to be several troops down the road this uh taking off with seven million pounds of thrust dundee will be going uh 17 500 miles an hour and around eight and a half minutes there's no way that's going to get to be routine too fast when people ask me she is a 12 day 12 hour day and that sounds like a lot of work it's not work if it's fun so you may be putting a lot of effort but it's not work it's fun there's no other job i'd rather have and i don't know of any other job that really brings into play my background more than this one there's there's no job where i could do and use all of the things in my background so much as this one but uh the job of preparing to fly in space is fantastic and i and i think that flying in space is going to be even better so how can i trade that in we've been through almost all the training that we need and although there are a few last-minute preparations and last-minute details to get down we're we're ready main engine throttle is going back to 104 percent challenger and this is it we're ready and waiting to hear that go for launch at cape canaveral florida as the space shuttle challenger approaches a historic flight it is by the clock t-minus 20 minutes we're in a 10-minute hold and you're watching a live picture of the orbiter poised and ready on pad 39a after six liftoffs it's well it's almost commonplace except that today there is a woman on board and she's ready to take her place in history dr sally rides soon to become america's first woman in space and good morning from cape canaveral i'm jane

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morning from cape canaveral i'm jane pauley at the kennedy space center with astronaut dick scobee and first of all we saw the clock say t minus 20 i said there was a 10 minute hold how do we get from uh 20 minutes by the clock to 7 33 which is our expected launch time well jane the uh 20 minute hold is set up to give the the cape people time if there's any problems in the launch countdown to take care of that kind of thing coming out of this 20-minute hold they will mow the on-board computers into the into the flight configuration in other words we'll go from uh ground operation to flight operations mode and that's what come happens coming out of 20-minute hold and then we count down to nine minutes and at nine minutes you'll get the go for launch is there any turning back at that point yes you can still go into holes or turn back that the place where it's very difficult to turn back the clock if you will is after the ap users start at five minutes and then we're consumable is limited and you have to do something you have to get it off the pad or shut down the apu's and recycle it and that takes some time i'm looking at a magnificent dawn but the reason is magnificent there's some clouds in the sky is this a good day for flying uh it looks like a good day for flying the clouds are breaking up and this is kind of a normal weather pattern for the cape uh you really just need scattered clouds and if you look out towards the shuttle landing site off to our right then you'll see that uh the clouds are fairly well broken up a few scattered clouds out there but it's probably a really good day for launch and we're going to launch in the minute uh now at 7 33 you saw the account has begun again we're now t minus 19 minutes and 30 no no three seconds to go before launch and it has already been a real busy day here at kennedy uh not just for the astronauts and the support crews but also for the crowds let's start the morning with the astronauts and it was a real early breakfast this morning [Music] the flight crew has been awakened and will be going into breakfast just a short time from now john fabian the tallest of the group

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john fabian the tallest of the group once quite worried that he was just too tall to be an astronaut with the room here and the crew leaving headquarters that was 4 45 this morning they get there in the astromobile now you're watching sally ride putting some biomedical sensors on her fellow mission specialist fabian fabian and dr norm thangard will be wired for uh for treatment and there is sally ride believing goodbye in the white room and crawling into the orbiter to find her position among the four other astronauts and taking her place in history we saw that happen that was at 5 34 this morning so they have what they've been in that uh in the orbiter now for an hour and a half yes and uh if there's any kind of holes or anything gets a rather painful laying on your back for that length of time with your head above your or below your legs yeah well they're not playing cards that's for sure well things do look pretty good now 18 minutes and counting nbc news science correspondent bob bizzell has been monitoring the activity inside the orbiter and he gives us a report as well on what nasa hopes to accomplish this mission bob jane good morning i'm over here in the press area where thousands of reporters are prepared to cover this mission even though this is the seventh flight of the space shuttle it has a lot of firsts and the crew has one of the busiest schedules they've ever had on any shuttle mission robert crippen the commander of the seventh shuttle mission will be the first astronaut to return to space in the shuttle he was the pilot or second in command on the first mission in april 1981. the pilot on this flight will be navy captain rick houck sally ride and her fellow mission specialist john fabian have two major tasks on the first and second days of the mission they will launch two commercial communication satellites one for canada and one for indonesia like this one launched on a previous shuttle flight then using the shuttle's robot arm they will release and then retrieve a west german satellite loaded with scientific experiments

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experiments this will be the first time the shuttle will retrieve an object from space the fifth crew member is a physician dr norman thagart he will be studying what nasa calls space adaptation syndrome the motion sickness which more than half of the shuttle astronauts in the past have suffered at the end of the six day mission the challenger will land on the concrete runway here at the kennedy space center the first time a space mission will return to the same place it left and jane to me that's one of the most exciting things about this mission the fact the spaceship will be coming back to the same place from which it left and it means that in terms of the history of space exploration i think that's a that's a very big moment that no no more splashdowns in the ocean or out in the siberian desert or even a landing air force and air force base in california coming right back to where they left jane thank you bob and uh we continue to wait for launch the count now 16 minutes uh to launch but that factor in another 10 minute hold so it's not uh not literally 16 minutes we are watching the clock for you um i'm told that uh some 100 million people will be watching this launch courtesy of nbc some other networks bob bizzell over at the press site with literally hundreds of press people from not just this country but around the world and the reason they are here well let's face it it's dr sally ride the fact that america is putting that's first woman in space is given the seventh launch of the space shuttle some particular interest dick i know you aren't uh directly responsible for sally's publicity but um i know everybody at nasa has been a little overwhelmed by the interest that this one woman has generated right well it's it's kind of like a first flight thing for for a lady to fly the first time it's uh it's unique different and interesting and so therefore you generate a lot of media interest and it has caused us in nasa a little bit of consternation because it's hard to pick and choose what sally has to do and trade that off with her clear training and things like that it makes it very difficult for her and she's a very noble person and handle it well this is this is certainly not showbiz this is very serious business but it's also extremely exciting and

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but it's also extremely exciting and there's a man here who has well he's virtually seen it all he's not a technician he is an artist his name is bob mccall he's been sketching the space program since uh nasa was formed in the late 50s and you've probably seen a lot of his work that's just one of the many posters he's done the stamps he's been commissioned to do for nasa and plus emblems and he's working even as we speak bob can we say good morning bob mccall can you hear me well there's a busy man he's not listening he's looking at his watch and he's painting and uh doesn't hear what i'm saying he has seen i don't countless launches and he has uh painted and sketched the astronauts and i don't know whether it's space that inspires this man or astronauts maybe a little bit later we can get back to bob mccall i'd like to ask him for one thing if if astronaut sally ride is has his heroic a figure to him as some of the original astronauts were when he was first so taken and you can see what he's working on what's he doing is that in watercolors well we'll see more of that a little bit later dick can you um how did you get taken by the space program i don't know if the rest of us can explain what made our hearts rush but you're a pilot well it was basically a natural progression from what i was test pilot edwards air force base in california and it was a natural progression from what i was doing into what i'm doing now and it was just kind of a nice thing when you get a ride on the uh orbita flight 13 which is supposed to go next april how much do you know i think a little bit later when we get closer i'm going to ask you specifically what's going to be happening i'm going to ask you questions like what's it feel like and you're going to give me answers i'm going to give you answers but it's going to be based on crew debriefings and simulations that i've been in not on actually have having flown so the realism i don't have the realism that somebody's phone

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the realism that somebody's phone has to do you have to experience it or can nasa simulate fairly accurately the sights and the sounds and the and the shivers and shakes according to the crews the the simulation we have is very good it does a nice job of simulating what goes on but like in any simulation there are a lot of things that you can't do really act real accurately and so it has some shortcomings but i think that you have to have been there and done something like that to have a really good feeling for what goes on the description you get most often coming back is this moment a little frightening even for the trained experts or is it just a pharrell i don't know it's i don't think frightening is the word i think if you're you end up with a little apprehension anytime you're going to do something like this if somebody's going to light a six and a half million pound candle under you and send you off into space it's uh it's got to be exciting but there's some apprehension involved and i think the apprehension is that that you don't want to fail yourself or the program or anything else so you want to do everything right and if something goes wrong during the ascent or something like that that you perform correctly and do everything you're supposed to do and one member of that crew of five is is probably feeling a little more uh pressure than the other simply because we are watching her so carefully we are finally at long last america sending a woman into space it certainly took us a long time but have we really come a long way we ask some people [Music] men don't necessarily have a market on outer space the basic requirements for an astronaut is probably intelligence not physical strength it doesn't really matter what sex it is as long as we advance a lot of progress for our country an american woman gets to go up in space we finally got around to having one we're getting right up there with all the big boys sure a woman going out that's great kind of behind the times it should have been done 10 years ago certainly their health is better they live longer when i fly

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well i think she's getting a lot of more credit than sh than any other astronaut just because she's a woman i feel it's a great privilege for women as long as a man goes up with her though i think it's up to a man to do this keep the women downstairs where they belong i don't think i should start the kitchen i think they definitely belong there i wish i was going up with her in a dormant now if they can do anything uh is it possible that they're trying to see if uh like sex for instance women get a chance to prove themselves so she doesn't mess it up for us all are you doing it for all the women and for my grandchild to come and making a better world you worked your tail off to get there and just keep working at it go for it we're all behind you right on sally sally your star and remember that in a moment we'll find out why camden new jersey is sending ants into space and when we come back we expect to be able to announce or go for launch first a message non-essential personnel have cleared the launch danger area and has been assured that the closeout crews have cleared the roadblocks and it's nine minutes and we are in another hold a built-in 10-minute hold all is uh nominal as they say here at nasa for a launch this morning we're still looking for a launch at 7 33 eastern time here at the kennedy space center and a good morning to you i'm jane pauley and i'm here at uh kennedy at the nbc uh cottage by the cape with astronaut dick scobee who is going to be our guest expert and nbc correspondent bob bazelle who is pretty knowledgeable on the subject too the clock says nine minutes dick we are in another hold what is our status and when do we get to go for launch well at nine minutes jane they pull the whole launch control center one console at a time to make sure that everybody is prepared for the launch and that nobody has any constraints or

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and that nobody has any constraints or holes that are going to keep them from launching when the when the launch director satisfies himself if that's all taken care of and that'll happen right before they come out of the hole then the thing will come out of the hold at nine minutes and start counting down to the launch how long's this polling process take uh it generally doesn't take very long but they have 10 minutes set aside to do it so it's uh it usually takes a couple three minutes but it's it's something that's that has to be done and they give themselves a little extra time in case somebody does think they have a problem yeah bobazzell you've been working this morning yes i was still alive but i haven't been working quite as long as the astronauts changed the five astronauts were awakened at 3 13 am this morning to begin their preparations for their trip into space they were wearing of striped jerseys which are inscribed with a challenger and then they changed into their flight suits all five of them went outside to the cheers of their nasa colleagues which is a traditional part of the morning and strip into space they were then loaded into what they call the astro van here at the kennedy space center it's actually an rv took them out in the darkness to the pad 39a bob crippen the commander was the first one to get dressed up to go inside the capsule a lot of smiles from the crew there we see the ship ready to go sally ride put some biomedical sensors part of an experiment on her colleague john fabian and there's the columbia ready to go and there goes sally ride with her helmet on into the capsule they seal up the capsule and they're out there now they're ready to go and when they come out of this hold that'll be it one of the things that's important i think about the coming out of this hold is that after they come out of the nine minute hold they can't go again for 24 hours a lot of thing complicated things happen and they think hard before they come out of this nine minutes gentlemen actually it's a little more crowded than we've been leading the folks at home to believe this morning yes there are five astronauts aboard but they have some company they have some astronauts aboard too the space shuttle as you know has been called nasa's space truck it'll haul everything up into space from satellites

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everything up into space from satellites to space platforms and insects yes insects ants to be specific some students some high school students hope to find out what happens to a colony event in zero g these carpenter ants from camden new jersey will be the first social colony in space scientists hope to learn a lot from the project but what did the students learn in this particular case they had to work with a lot of things they had to find out that this didn't work and that didn't work and that they had to work as a team that no one person had all the answers to this they had to learn how to accept failure and they've had we've had a lot of failure in the project two rival schools worked together camden and woodrow wilson the idea of using ants came from a woodrow wilson student much of the groundwork came from camden we involved as many departments as we could in the school for example the vocational education department was primarily responsible for producing the experiment first with the mechanical drawing department then going over to the metal shop the wood shop the electrical shop and the print shop helped out by putting together two thousand press kits artwork along the walls chronicles student interest in their five-year space program ants were selected by students simply because it captured their imagination the real goal is to encourage our minority students to enter science engineering mathematics computer science i know of two right now in a project that we're considering dropping out of school completely before i was not even worried about um anything in the future about like engineering or whatever but now i'm just undecided if i should go into engineering or to computer science and two of the students who've been in charge of this project andre nieves is here and clisher buell is here all the way from camden new jersey is this the first launch you've seen yes it is you're pretty excited yes i am because um our school is here uh mayor of ramsay primus is here our the principal from canada high school

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the principal from canada high school and woodrow wilson is here and it's been very exciting you concerned about your aunts pardon me are you concerned about it oh definitely i hope they're still alive and andre maybe you can explain to me why anybody is interested in the happy home of a colony of ants in zero g well um we want to study how the ants react to zero g to see how much disorientation if there is any will affect them we want to make sure we we really want to find out is if the disorientation will break down the social process that they go through does this have a human application yes it does um of course um nasa has plans on building space colonies in the future and um by studying the reaction of the ants to zero g maybe we can apply that to human space colonies in the future how interested in science were you before this project got started i was interested lightly in astronomy but now i'm really deep into like everything else such as um biology chemistry you know physics and the computer sciences too what do you want to be when you grow up when i grow up engineer hopefully yeah cliche i would like to go into uh communications being in orbit 81 has given me the chance to speak to various organizations schools businesses and i just love to talk and i love to meet people it's rather changed your life then yes it has well we hope the astronauts do real well by you and congratulations we'll be we'll be watching certainly well the launch countdown is about to resume we'll uh bring the latest to you in a moment first a message test personnel on the ground monitor the systems at t minus four minutes a purge of the main engines will start uh and weather looking good uh for you're listening to hugh harris who says the clouds are moving out of the area and the weather is looking good it is an extraordinarily beautiful morning here at the kennedy space center i am jane pauley and the clock is resumed we have uh just left our last 10 minute hold and and now the the clock is uh ticking again

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is uh ticking again uh barring some unforeseen difficulties dick scoby we should have a launch on schedule at 7 33. that's correct jane it should go off on time i take it it's a beautiful day for them i take it then that they pull the uh that everybody at their respective consoles and everything yeah they just got the report through this they pulled all the consoles and ranged safety and they're all go for launch what happens aboard the orbiter now we've got five astronauts there you have described their physical position it didn't sound real comfortable they're busy now aren't they they start getting a little busy now there are some things to monitor where it gets very busy is inside of five minutes because at six minutes you configure a lot of switches in the cockpit for apu start for the starting auxiliary power units that run the hydraulics that the flight controls and things like that work on so inside of five minutes is where it really gets busy in the cockpit and in the meantime they're monitoring systems and doing minimal amount activity between nine minutes and five minutes but at five minutes is the critical point when you start the apu i just want to say something from having watched all all six of these in the past one key moment is always at t minus 31 seconds because at that moment the computers take over and on board the onboard computers take over and nothing can stop the launch from t-minus 31 on except the real emergency when somebody would hit a panic button and everything would stop well not necessarily a panic button the redundant set launch sequencer is what is which the thing that goes into at 31 seconds that monitors a number of parameters on the vehicle and for instance if the main engines don't start correctly or they don't come up to speed when they're supposed to then you get an automatic shutdown of the launch count and it will stop and hold the count right there but 31 t-minus 31 seconds there's a moment that everybody works 31 when do um when do the fireworks start because it's a little a little disconcerting when you're watching the clock and it doesn't say 109 8 7 6 5 4 3 2 1 yet and already you see a steam billowing which sometimes you think is smoke you hear it rumbling when does that start well the they start about 11 seconds before the actual launch they start the water system working on the cooling for the

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system working on the cooling for the pad and the noise suppression and then about six seconds before the launch the main engines start their start sequence and so they're up to speed by launch which occurs six seconds after they start so we're waiting for that to happen now reminding you that uh we're all what about three miles away from the launch site and uh there are virtually uh with the exception of a few people in a tank nearby they're for rescue purposes there's nobody out there the five astronauts right now the access arm the last link that the uh between the tower and the orbiter has is being moved back we can i don't know if we can see it in that picture it's already back they were just moving it back they're out there all by themselves nobody around looking at that bob i think we ought to tell the folks who's where and who's doing what uh when the space shuttle lifts off this morning as i said there will be five people on the board this is the biggest crowd we've sent to space on a space shuttle so far a crew of four has been conventional and when uh norman thaggart was added to the crew in december nasa had to redo the seating plan so we'll find commander robert crippen he gets the front row seat at the controls and pilot rick hauck sits directly to his right behind them sally rides she's the flight engineer and mission specialist john fabian next to her and dr norm thagar he gets the window seat but he's all by himself down in the mid deck and i'm told uh dick you're his friend you can confirm this that he's carrying a cassette of uh devo now it's my speculation that because he's doing the research on space sickness that he brought the tape to induce sickness should it become necessary in order to get the required data that he needs i'm not so sure that's true jane i think he really likes devo when he brought it along so he'd have some music to listen to because we are allowed to bring our own personal music collections and norm does like and that's why they made him sit downstairs all by himself i don't want to comment on that one and we're coming up on five minutes they should be starting the apu's right now which is a critical phase of our launch countdown is that something that we can see when can we

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we can see when can we see something uh probably about six seconds before launch when the main engine started you see the steam coming off of it because from here it's very difficult to see that the apu's are running and they do not put out any any exhaust that you can see can i ask you i've identified sally ride dr ride as the flight engineer now i know she's a trained astrophysicist and her expertise is on that the uh arm that will be deployed later on during the mission now what does a flight engineer do what kind of expertise does she have for that flight engineer is kind of a misnomer but we've we've found that we operate better with a three-person crew with somebody in the center seat monitoring what's going on especially when we have emergencies and so the flight engineer or the center seat person is a backup for the other crew to monitor systems and things like that if they get busy with emergency procedures it's also an aid during the launch phase when things get very very hectic and there are a lot of things going on that it's a it's another crew member another set of eyes in the cockpit to aid the in the procedures this is not a page turner this is a pretty critical not a page turner it's a good critical position and uh you're a pilot how do you rely on a flight engineer i think we all rely on them i think that you make use of the crew people you have on board and i think it's uh it's a necessary position we didn't do it on the first few flights but we have opted to do that now and it makes the crew load a lot better during the launch phase where things are really happening quickly bob you've got your ear on on nasa launch control what do you hear the apu's the auxiliary park power units were started a couple minutes ago successfully everything else is going just the way it's supposed to it looks like we're having a very if we can call a launch routine on the seventh one this one is going about as well as it and could and that thing's loaded uh fully loaded with fuel who knows some uh statistics some trivia stuff we can uh seven million pounds of thrust yes and the whole orbiter weighs something like what four and a half million pounds and they've got to lift that off the ground and hurl it into space but that's a actually it's a pretty good thrust

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actually it's a pretty good thrust weight ratio it hustles off the pad pretty well for a rocket ship it's at about a one and a half one to thrust weight ratio in other words the amount of thrust the engines put out compared to the weight of the stack something that we got to talk about before this gets off um because you uh it it's so exciting to watch but after it gets up in the air then there are other exciting things that begin to happen and you're going to think it's falling apart it's not we lose the solid rocket boosters that watch stage after flight about two minutes into the flight the solid rocket motors come off and what happens they just uh they have separation motors on them they separate from the external tank itself and they have a drug parachute that comes off and then they enter into the ocean we've got a model here bob maybe you could yeah let me hold it well yeah i'll try not to turn this upside down these are the uh solid rocket places these two wings the large structures on the side when the orbiter flies it flies upside down heads down with the tail towards the earth and about two minutes into the flight and about 60 miles down range the solid rocket motors separate and we'll watch that now the clock's getting real close what do you say we just listen to hugh harris hugh harris launch control coming up on the 92nd point in our countdown t minus one minute thirty seconds and counting everything going smoothly here at the kennedy space center and waiting for the beginning of the flight of sts-7 t minus one minute 15 seconds and the liquid hydrogen tank is at flight pressure t-minus one minute and the firing system for the sound suppression water system on the pad is armed t-minus 55 the hydrogen igniters under the orbiter's engines

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igniters under the orbiter's engines have been armed these devices are used to ensure that hydrogen flowing through the engines does not accumulate causing a small explosion and pulse or pressure pulse at engine ignition t minus 35 seconds we're just a few seconds away from switching command to the onboard computers we've gone for auto sequence start t-minus 25 seconds and counting the sequencer on board now controlling the final seconds t minus 17 seconds and counting the body flap and speed breaker in launch position t minus 10 9 eight seven six we go for main engine start we have main engine start and ignition and liftoff liftoff of sts-7 and america's first woman astronaut and the shuttle has cleared the tower houston now controlling mission control confirms role maneuvers 45 seconds challenger now three nautical miles an altitude still looking good running back to 104 percent give it a go at throttle up

[00:30:11 (https://www.youtube.com/watch?v=8l6FJFrupRM&t=1811s)](https://www.youtube.com/watch?v=8l6FJFrupRM&t=1811s)

[Music] mark one minute 40 seconds challenger now 16 nautical miles in altitude 13 nautical miles downrange gripping halcon company now coming into the last traces of the earth's atmosphere challenger now 19 nautical miles in altitude one minute 55 seconds challenger 21 nautical miles in altitude 21 nautical miles downrange standing by now for solid rocket booster separation rogers out 12 minutes 12 seconds confirm good solid rocket booster separation uh the booster is falling away now two minutes 20 seconds challenger houston your first stage performance was nominal that was capcom roy bridges advising first stage performance onboard guidance as converging now program challenger is now steering for a precise window in space for main engine shutdown two minutes 40 seconds challenger 35 nautical miles altitude we've never seen of the solid rocket booster separation it was textbook wasn't it absolutely beautiful it was textbook uh a little bit on behalf of nasa the this liftoff procedure is um the last several launches has gone fairly smoothly very good the uh the people at kennedy are just absolutely super when it comes to launches that's that's their business and that's what they do best and they do

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and that's what they do best and they do a fine job of it and they're getting this thing down to real science now and this today was a picture-perfect launch sequence the show has moved on we're now listening to mission control in houston as soon as that lifts off the ground it uh it reverts to yes 45 nautical miles from the altitude returns status check emission control by flight director jay green the return status and that means that you can no longer turn the vehicle around and make it back to the kennedy runway so the next place if there were an emergency and there's no indication and of course who wasn't thinking as we watched that launch about uh dr sally ride a few moments ago when those big rockets heat that thing up in the into space let's watch it again and while we do let's hear so what sally was thinking about or thought you might be seven six we go for main engine start we have main engine start and ignition and liftoff liftoff of sts-7 and america's first woman astronaut and the shuttle has we know exactly what to expect to happen we know intellectually what the computers are going to be telling us and what all that all the dials are going to be saying we know we know all that we know what to look for and when it's going right and when it's going wrong but emotionally i think that everyone has has said that you're really caught up in the caught up in the moment and although you've just spent a year training to look at all these dials and uh and computers all you're doing is looking staring straight out the window with your eyes wide open and for the record everything is going

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and for the record everything is going very well more on our special coverage of sts-7 after message that sounds great the president call says should challenger lose one off targets even if two engines go out and everything is going very smoothly now seven minutes 20 30 seconds into launch and uh we just got a pretty important announcement prestamiko means what single engine pressed which means they can lose two engines now and still make it the main engine cut off and still safely retain orbit dick scobee astronaut bob bazelle the two of you explained to us we're we're going to be getting e.t external tank separation in a moment i'll do the holding he'll do the explain it's flying like this upside down like this upside down and in about eight at eight minutes and 32 seconds which is about 30 seconds from now the main engines will cut off some big lines here the 17 inch lines in the back will disconnect and the tank will separate from the orbiter the orbiter will do a minus z what we call a minus z translation which is a translation away from the tank and then we'll do a translation forward so they can get pictures of the tank as the tank separates and we expand 20 seconds in 20 seconds 12 seconds from now and this is a crucial moment i don't think you need to put that back we don't need that time the tank's gonna go so we'll uh we'll get rid of that in the history of mankind four men one woman watch us up 8 minutes 44 seconds confirm external tank separation 8 minutes 50 seconds challenger now performing an evasive maneuver moving below and beyond the external tank don't know ghost status check emission control by flight director jay green for the first homes burn in shutting down the auxiliary power units

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challenger houston your goal for nominal alums one apu shut down on time that was capcom uh roy bridges uh given a goal for a nominal uh holmes one burn after the main engines cut off what we call an orbital maneuvering system burn which is two small engines on the back burn to give you a little bit of higher orbit well there's a beautiful shot of the smoke trail from the challenger must be taken from the chase plane right in the air yes it is dick i wonder if you could tell us what uh what mission control is is talking about at this point uh they're looking at all the parameters on the vehicle to make sure that everything's go for the orbital maneuvering system burn and i think they've just given the go for the for the burn and it happens fairly quickly after external tank separation so we ought to expect that here in about another 30 seconds or so they just announced that the challenger is a 1100 nautical miles my math isn't that great but that's about 1250 miles away from here it hasn't been very long since they left nope all going very smoothly we'll be back with more on the second flight of the challenger after a message well liftoff is history the mission of the challenger is underway and the record books will show that it was a picture-perfect one here at cape canaveral where but we're where the story was and it's moved many many miles off from here today's launch will obviously go down in the history books and uh because sally ride the first american woman was bored she was not the first woman she was not the second even 20 years ago it was almost to the day as a matter of fact the soviets sent valentina tereshkova into space she orbited the earth for three days in the vostok six though rumors have it that she was sick almost to the point of hysteria due to lack of training the soviet union didn't send another woman up for another 20 years and then last august

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another 20 years and then last august just after nasa announced that sally ride would fly on the challenger so atlanta savitskaya became the second woman in space her eight day mission aboard the soyuz t7 was a success and i'm back with dick scobee the astronaut and bob bazelle the correspondent dick um i have observed that some of the astronauts and you pilots specifically are an interesting mixture of chivalry and chauvinism how difficult is it for you to uh to to to work now with with women as uh colleagues and uh potentially pilots one day i don't well i think we are that's the particular breed you described but i don't think that uh we view working with the women any different word you know their physiological differences obviously and that's nice because that's the way the world is structured but as far as working with the ladies uh there's professionals and we're professionals and we work together as professionals and i think in in the type of business we have that's what you have to do like to make an observation robert crippen has said that uh he has found it's more politic to identify sally as a woman but he still thinks a virgil lady you called her a lady too that's an interesting point because yesterday there was press conference in general abramson who's the head of the shuttle program insisted despite repeated questions on saying lady astronauts he would not use the word women well believe me the ladies are ladies they are but they're also professionals in their fields and their experts and their experts on the on the orbiter and they're experts in what we do and they're technically qualified to do everything we do dick you you said there obviously are physiological differences do they matter in space that's one of the things i think we're going to find out i i honestly don't know i don't know what nasa's background data is on the physiological differences between men and women in a zero-g environment the russians may have data but i don't think that i'm not privy to it and i don't know what the differences aren't true listen we saw the best show we're going to see all day what do you say we replay the historic launch of sds-7 it was a beauty and here's how it went nine eight seven

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and here's how it went nine eight seven six we go for main engine start we have main engine start and the ignition and liftoff liftoff of sts-7 and america's first woman astronaut from our position at this point we haven't heard a thing yet we're three miles away and maybe right about now wham it hits and the earth starts trembling under your feet everybody who's ever seen a watch always comments on that as being the greatest part of the experience is the feeling the actual feeling of the sound hitting you because there's so much power in those engines you can never experience you know television is really nice and you all provide some great pictures but you can't experience the physical part of it of hearing the sound and feeling the ground shaking the thing goes on there's no way to remember our words are pretty pretty inadequate to that kind of an experience just got to see one and presumably when these things start going up what is the um optimally nasa hopes to have uh shuttles like this being launched every how often about twice a month when we get into the real operations and and next year i believe we have like 11 flights scheduled so about once a month you can go watch one take off and and no matter how good they get at it is still going to shake the earth yeah and it's still going to be exciting it's still going to be fun and it's not going to be routine by any means absolutely how many of have you seen uh this is my fourth one really you you're essentially a novice that well i'm a real novice but i've probably seen a fair almost as many as anybody seen in the office yes as a pilot at what point does commander robert crippen start to fly well you can fly the vehicle at any point in the trajectory if you have to it has steerable gimbals on the engine so you can fly it the whole stack if you need to from the cockpit right neal nbc correspondent roy neal is standing by at mission control in houston well that's where the action is now if you're not on the orbiter roy what's happening there well we're a little envious jane you've had all that marvelous weather

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had all that marvelous weather tremendous visibility and we're in windowless mission control land here in houston 1500 miles from that site but we've observed some very interesting things for example shortly before liftoff steve hawley sally rides husband also an astronaut who will fly uh next year steve came up and he said let me see my nose sally have a ball and that was one of the little incidents that happened roy bridges in mission control is the capsule communicator and it's interesting to note that there are two teams that will be working in this room today because one of the first orders of business later on in the day will be the launch of a commercial satellite the telesat for canada so we will see roy bridges were currently operating there being replaced by john mcbride he's the fellow bridges is the fellow with uh just to the right there of the photographer in center picture here at the johnson space center they are now in touch with all of the worldwide tracking stations everything going well next big order of business for us will be to watch the payload bay doors open on live television in about an hour jane and thank you roy neal from mission control in houston bob i wanted to ask you you would mention that you had been on four you've seen four launches but what you didn't say is that you saw one of them in one of those t-38 planes with sally ride in the back seat tell us what that was like when you were flying around uh watching the thing go up sally and i had the chase assignment for return one of the chase assignments for return to launch site for the first launch so we saw the first launch sts-1 fly off the pad from about 18 000 feet and about seven miles south of the pad and it's a very interesting view and besides sally being a super person she's also a good pilot and a good mission specialist she does everything well and she did a super job as as my backseat in the chase chase mission but i s watching it from a chase airplane and watching it from the ground i still prefer washing it from the ground because it stimulates more of your senses when you're standing on the ground and feeling the earth

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on the ground and feeling the earth shake and the air crack and things like that it's a beautiful view from up in an airplane but the senses are stimulated a whole lot more on the ground when you do it right we're in the right place so stay with us we'll be back after this back at the kennedy space center with astronaut dick scobee and bob brazell and who knows that story about sally ride bob the story actually came from rick hawk who was our astronaut like dick is this time on a previous mission and one time he and sally had flown into t-38 just as you did at the chase but they were on a mission to some place i think it was in the los angeles area the t-38 broke down and they had to ride back on a commercial airline but all they had was their flight suits and their parachutes attached the two of them walked into the airliner the pilot came out and said don't you people trust me what's your favorite sally ride story tell us something we don't know i don't have any cellulite stories i can't tell you that so yeah except that she flies good back up in the t-38 okay i'll tell you something i know you don't know sally ride's favorite television program are you ready the today show the a team the agent on nbc she's wild about mr t that's true i mean this is a woman with four degrees from stanford university who hasn't wasted a minute of her life who is also married to an astronaut both serious people and when they're off duty they watch television and they watch the a-team there's a there's a recommendation that's sally wright's family that's her sister karen who they know better is as bear father dale and mother joyce who have come here to be a real proud of of sister karen is a little sister she's a presbyterian minister father is a political science uh professor in santa monica california and mother joyce is a real colorful lady she i think thinks that her housekeeping abilities are somewhat better than sally's

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sally's which from what i understand in san a whole lot well it has been uh quite a morning i'd like to say in a personal note that we did take a long time to get a woman in space but um and sally would be the first to tell you that she's just doing her job just part of the team but it was maybe one small step for sally but it was certainly a big leap for womankind and we're real proud of her as we say goodbye this morning a reminder to stay tuned to nbc news for the latest on the space shuttle challenger as we take one last look at the spectacular events of the morning

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